

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/579,168
Source: IFWP
Date Processed by STIC: 1/11/07

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 01/11/2007

PATENT APPLICATION: US/10/579,168

TIME: 10:29:54

Input Set : A:\SEQLISTING.txt

Output Set: N:\CRF4\01112007\J579168.raw

```

3 <110> APPLICANT: The Queen's University of Belfast
4      Mulligan, Karl
5      McCormick, Derek
6      Johnston, Patrick
8 <120> TITLE OF INVENTION: Cancer Diagnosis and Therapy
10 <130> FILE REFERENCE: 36290-0409-00-US (43784-226426)
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/579,168
C--> 13 <141> CURRENT FILING DATE: 2006-05-12
15 <150> PRIOR APPLICATION NUMBER: GB0326578.2
16 <151> PRIOR FILING DATE: 2003-11-14
18 <160> NUMBER OF SEQ ID NOS: 5
20 <170> SOFTWARE: PatentIn version 3.3
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 2823
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: cDNA clone of MQ1 cell surface glycoprotein of Astrocytoma
cell
30 <400> SEQUENCE: 1
31 gctcagaata ccaatgactg cagccctcat ccctgttaca acagcggcac ctgtgtggat      60
33 ggagacaact ggtaccggtg cgaatgtgcc cggggttttg ctgggcccga ctgcagaata      120
35 aacatcaatg aatgccagtc ttcacctgtg gcctttggag cgacctgtgt ggatgagatc      180
37 aatggtctacc ggtgtgtctg ccctccaggg cacagtgggtg ccaagtgccca ggaagtttca      240
39 gggagacctt gcatcaccat ggggagtgtg ataccagatg gggccaaatg ggatgatgac      300
41 tgtaataacct gccagtgcct gaatggacgg atcgcttctg caaaggctctg gtgtggccct      360
43 cgaccttgcc tgctccacaa agggcacagc gagtgcceca gcgggcagag ctgcatcccc      420
45 atcctggacg accagtgcct cgtccacccc tgcactgggtg tgggcgagtg tcggtcttcc      480
47 agtctccagc cgggtgaagac aaagtgcacc tctgactcct attaccagga taactgtgcg      540
49 aacatcacat ttacctttta caaggagatg atgtcaccag gtcttactac ggagcacatt      600
51 tgcagtgaat tgaggaattt gaatatTTTg aagaatgttt ccgctgaata ttcaatctac      660
53 atcgcttgcg agccttcccc ttcagcgaac aatgaaatac atgtggccat ttctgctgaa      720
55 gatatacggg atgatgggaa cccgatcaag gaaatcactg acaaaataat cgatcttggt      780
57 agtaaacgtg atggaaacag ctcgctgatt gctgccgttg cagaagtaag agttcagagg      840
59 cggcctctga agaacagaac agatttcctt gttcccttgc tgagctctgt cttaactgtg      900
61 gcttggtatct gttgcttggt gacggccttc tactggtgcc tgcggaagcg gcggaagccg      960
63 ggcagccaca cacactcagc ctctgaggac aacaccacca acaacgtgcg ggagcagctg      1020
65 aaccagatca aaaaccccat tgagaaacat ggggccaaca cgggtcccat caaggattat      1080
67 gagaacaaga actccaaaat gtctaaaata aggacacaca attctgaagt agaagaggac      1140
69 gacatggaca aacaccagca gaaagcccggt tttgccaaagc agccggcgta cacgtggta      1200
71 gacagagaag agaagccccc caacggcacg ccgacaaaac acccaaactg gacaaacaaa      1260
73 caggacaaca gagacttgga aagtgccag agcttaaacc gaatggagta catcgatatg      1320
75 cagaccgagg gactgcccgc cgctaggtag agtctgaggg cttgtagttc tttaaactgt      1380
77 cgtgtcatac tcgagtctga ggccgttgct gacttagaat ccctgtgtta atttaagttt      1440

```

RAW SEQUENCE LISTING

DATE: 01/11/2007

PATENT APPLICATION: US/10/579,168

TIME: 10:29:54

Input Set : A:\SEQLISTING.txt

Output Set: N:\CRF4\01112007\J579168.raw

```

79 tgacaagctg gcttacactg gcaatggtag tttctgtggt tggctgggaa atcgagtgcc 1500
81 gcatctcaca gctatgcaaa aagctagtca acagtaccct ggttgtgtgt ccccttgcag 1560
83 ccgacacggt ctccggtacg gctcccagga gcctgccag cccctgggtc tttgagctcc 1620
85 cacttctgcc agatgtccta atggtgatgc agtcttagat catagtttta tttatattta 1680
87 ttgactcttg agttgttttt gtatattggt tttatgatga cgtacaagta gttctgtatt 1740
89 tgaaagtgcc tttgcagctc agaaccacag caacgatcac aaatgacttt attattttatt 1800
91 ttttttaatt gtatttttgt tggtggggga ggggagactt tgatgtcagc agttgctggt 1860
93 aaaatgaaga atttaaagaa aaaaatgtca aaagtagaac tttgtatagt tatgtaaata 1920
95 attctttttt attaatcact gtgtatatat gatttattaa ctttaataatc aagagcctta 1980
97 aaacatcatt ccttttttatt tatatgtatg tgtttagaat tgaaggtttt tgatagcatt 2040
99 gtaagcgtat ggcttttatt ttttgaactc ttctcattac ttgttgcccta taagccaaaa 2100
101 ttaagggtgt tgaaaatagt ttattttaaa acaataggat gggcttctgt gccagaata 2160
103 ctgatggaat tttttgtac gacgtcagat gtttaaaaca ccttctatag catcacttaa 2220
105 aacacgtttt aaggactgac tgaggcagtt tgaggattag tttagaacag gtttttttgt 2280
107 ttgtttgttt tttgttttct tgccttagac ttgaaaagag acaggcaggt gatctgctgc 2340
109 agagcagtaa gggaacaagt tgagctatga cttaacatag ccaaaatgtg agtggttgaa 2400
111 tatgattaaa aatatcaaat taattgtgtg aacttggaag cacaccaatc ttactttgta 2460
113 aattctgatt tcttttcacc attcgtacat aatactgaac cacttgtaga tttgattttt 2520
115 tttttaatct actgcattta gggagtattc taataagcta gttgaatact tgaaccataa 2580
117 aatgtccagt aagatcactg tttagatttg ccatagagta cactgcctgc cttagttag 2640
119 gaaatcaaag tgctattacg aagttcaaga tcaaaaaggc ttataaaaca gagtaattct 2700
121 gttggttcac cattgagacc gtgaagatac tttgtattgt cctattagtg ttatatgaac 2760
123 atacaaatgc atctttgatg tggtgttctt ggcaataaat tttgaaaagt aatattttatt 2820
125 aaa 2823
128 <210> SEQ ID NO: 2
129 <211> LENGTH: 2476
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: cDNA clone of MQ-1 cell surface glycoprotein of Astrocytoma
cell
136 <400> SEQUENCE: 2
137 aggtctggtg tggccctcga ccttgccctgc tccacaaagg gcacagcgag tgccccagcg 60
139 ggcagagctg catccccatc ctggacgacc agtgcttcgt ccaccctgc actggtgtgg 120
141 gcgagtgtcg gtcttcaggt ctccagccgg tgaagacaaa gtgcacctct gactcctatt 180
143 accaggataa ctgtgcgaac atcacattta ctttaacaa ggagatgatg tcaccaggtc 240
145 ttactacgga gcacatttgc agtgaattga ggaatttgaa tattttgaag aatgtttccg 300
147 ctgaatatte aatctacatc gcttgcgagc cttcccttc agcgaacaat gaaatacatg 360
149 tggccatttc tgctgaagat atacgggatg atgggaacce gatcaaggaa atcactgaca 420
151 aaataatcga tcttgtagt aaacgtgatg gaaacagctc gctgattgct gccgttgcag 480
153 aagtaagagt tcagaggcgg cctctgaaga acagaacaga tttccttggt cccttgctga 540
155 gctctgtctt aactgtggct tggatctggt gcttggtgac ggccttctac tgggtgctgc 600
157 ggaagcggcg gaagccgggc agccacacac actcagcctc tgaggacaac accaccaaca 660
159 acgtgcggga gcagctgaac cagatcaaaa acccattga gaaacatggg gccaacacgg 720
161 tccccatcaa ggattatgag aacaagaact ccaaaatgtc taaaataagg acacacaatt 780
163 ctgaagtaga agaggacgac atggacaaac accagcagaa agcccggttt gccaaagcagc 840
165 cggcgtagac gctggtagac agagaagaga agcccccaa cggcacgccc acaaaacacc 900
167 caaactggac aaacaaacag gacaacagag acttggaag tgccagagc ttaaaccgaa 960
169 tggagtacat cgtatagcag accgcgggca ctgccgcgc taggtagagt ctgagggtt 1020
171 gtagttcttt aaactgtcgt gtcatactcg agtctgaggc cgttgctgac ttagaatccc 1080

```

RAW SEQUENCE LISTING

DATE: 01/11/2007

PATENT APPLICATION: US/10/579,168

TIME: 10:29:54

Input Set : A:\SEQLISTING.txt

Output Set: N:\CRF4\01112007\J579168.raw

```

173 tgtgttaatt taagttttga caagctggct tacactggca atggtagttt ctgtgggttg 1140
175 ctgggaaatc gagtgccgca tctcacagct atgcaaaaag ctagtcaaca gtaccctggt 1200
177 tgtgtgtccc cttgcagccg acacgggtctc ggatcaggct cccaggagcc tgcccagccc 1260
179 cctgggtcttt gagctcccac ttctgccaga tgctctaata gtgatgcagt cttagatcat 1320
181 agtttttatt atattttatt actcttgagt tgtttttgta tattggtttt atgatgacgt 1380
183 acaagtagtt ctgtatttga aagtgccttt gcagctcaga accacagcaa cgatcacaaa 1440
185 tgacttttatt atttattttt ttttaattgta tttttgttgt tgggggagggg gagactttga 1500
187 tgtcagcagt tgctggtaaa atgaagaatt taaagaaaaa aatgtcaaaa gtagaacttt 1560
189 gtatatgtat gtaaataatt cttttttatt aatcactgtg tatatttgat ttattaactt 1620
191 aataatcaag agccttaaaa catcattcct ttttatttat atgtatgtgt ttagaattga 1680
193 aggtttttga tagcattgta agcgtatggc tttatttttt tgaactcttc tcattacttg 1740
195 ttgcctataa gccaaaatta aggtgtttga aaatagttta ttttaaaaca ataggatggg 1800
197 cttctgtgcc cagaatactg atggaatttt tttgtacgac gtcagatgtt taaaacacct 1860
199 tctatagcat cacttaaaac acgttttaag gactgactga ggcagtttga ggattagttt 1920
201 agaacagggt tttttgtttg tttgtttttt gtttttctgc tttagacttg aaaagagaca 1980
203 ggcagggtgat ctgctgcaga gcagtaaggg aacaagttga gctatgactt aacatagcca 2040
205 aaatgtgagt ggttgaatat gattaaaaat atcaaattaa ttgtgtgaac ttggaagcac 2100
207 accaatctta ctttgtaaat tctgatttct tttcaccatt cgtacataat actgaaccac 2160
209 ttgtagattt gatttttttt ttaatctact gcatttaggg agtattctaa taagctagtt 2220
211 gaatacttga accataaaat gtccagtaag atcactgttt agatttgcca tagagtacac 2280
213 tgccctgcctt aagtgaggaa atcaaagtgc tattacgaag ttcaagatca aaaaggctta 2340
215 taaaacagag taatcttggt gggtccaccat tgagaccgtg aagatacttt gtattgtcct 2400
217 attagtgtta tatgaacata caaatgcata tttgatgtgt tgttcttggc aataaatttt 2460
219 gaaaagtaat atttat 2476

```

222 <210> SEQ ID NO: 3

223 <211> LENGTH: 2721

224 <212> TYPE: DNA

225 <213> ORGANISM: Artificial Sequence

227 <220> FEATURE:

228 <223> OTHER INFORMATION: Splice Variant

230 <400> SEQUENCE: 3

```

231 atgcgttccc caggacgcg cggccgggtcc gggcgccccc taagcctcct gctcgccctg 60
233 ctctgtgccc tgcgagccaa ggtgtgtggg gcctcgggtc agttcgagtt ggagatcctg 120
235 tccatgcaga acgtgaacgg ggagctgcag aacgggaact gctcgggcgg cgcccggaac 180
237 ccgggagacc gcaagtgcac ccgcgacgag tgtgacacat acttcaaagt gtgcctcaag 240
239 gagtatcagt cccgcgtcac ggccgggggg ccctgcagct tcggctcagg gtccacgcct 300
241 gtcacgcggg gcaacacctt caacctcaag gccagccgcg gcaacgaccg caaccgcatc 360
243 gtgctgcctt tcagtttcgc ctggccgagg tcctatacgt tgcttgtgga ggctgtggat 420
245 tccagtaatg acaccgtcga acatcacatt tacctttaac aaggagatga tgtcaccagg 480
247 tcttactacg gagcacattt gcagtgaatt gaggaatttg aatattttga agaattgttc 540
249 cgctgaatat tcaatctaca tcgcttgcca gccttcccc tccagcgaaca atgaaatata 600
251 tgtggccatt tctgctgaag atatacggga tgatgggaac ccgatcaagg aaatcactga 660
253 caaaataatc gatcttgta gtaaacgtga tggaaacagc tcgctgattg ctgccgttgc 720
255 agaagtaaga gttcagaggc ggctctgaa gaacagaaca gatttccttg ttcccttgct 780
257 gagctctgtc ttaactgtgg cttggatctg ttgcttggtg acggccttct actggtgcct 840
259 gcggaagcgg cggaagccgg gcagccacac acactcagcc tctgaggaca acaccacaa 900
261 caacgtgcgg gagcagctga accagatcaa aaacccatt gagaaacatg gggccaacac 960
263 ggtccccatc aaggattatg agaacaagaa ctccaaaatg tctaaaataa ggacacacaa 1020
265 ttctgaagta gaagaggacg acatggacaa acaccagcag aaagcccggt ttgccaagca 1080

```

RAW SEQUENCE LISTING

DATE: 01/11/2007

PATENT APPLICATION: US/10/579,168

TIME: 10:29:54

Input Set : A:\SEQLISTING.txt

Output Set: N:\CRF4\01112007\J579168.raw

```

267 gccggcgctac acgctggttag acagagaaga gaagcccccc aacggcacgc cgacaaaaca 1140
269 cccaaactgg acaaacaaac aggacaacag agacttgga agtgcccaga gcttaaaccg 1200
271 aatggagtag atcgtatagc agaccgcggg cactgccgcc gctaggtaga gtctgagggc 1260
273 ttgtagttct ttaaactgtc gtgtcatact cgagtctgag gccgttgctg acttagaatc 1320
275 cctgtgttaa tttaagtttt gacaagctgg cttacactgg caatggtagt ttctgtggtt 1380
277 ggctgggaaa tcgagtgcgc catctcacag ctatgcaaaa agctagtcaa cagtaccctg 1440
279 gttgtgtgtc cccttgccgc cgacacggtc tcggatcagg ctcccaggag cctgcccagc 1500
281 cccctggtct ttgagctccc acttctgcca gatgtcctaa tggatgatgca gtcttagatc 1560
283 atagttttat ttatatattat tgactcttga gttgtttttg tatattgggt ttatgatgac 1620
285 gtacaagtag ttctgtattt gaaagtgcct ttgcagctca gaaccacagc aacgatcaca 1680
287 aatgacttta ttatttattt tttttaattg tatttttgtt gttgggggag gggagacttt 1740
289 gatgtcagca gttgctggta aaatgaagaa tttaaagaaa aaaatgtcaa aagtagaact 1800
291 ttgtatagtt atgtaaataa ttctttttta ttaatcactg tgtatatttg atttattaac 1860
293 ttaataatca agagccttaa aacatcattc ctttttattt atatgtatgt gtttagaatt 1920
295 gaaggttttt gatagcattg taagcgtatg gctttatttt tttgaactct tctcattact 1980
297 tgttgccctat aagccaaaat taagggtgtt gaaaatagtt tattttaaaa caataggatg 2040
299 ggcttctgtg cccagaatac tgatggaatt tttttgtacg acgtcagatg tttaaaacac 2100
301 cttctatagc atcacttaaa acacgtttta aggactgact gaggcagttt gaggattagt 2160
303 ttagaacagg tttttttgtt tgtttgtttt ttgtttttct gcttttagact tgaaaagaga 2220
305 caggcaggtg atctgctgca gagcagtaag ggaacaagtt gagctatgac ttaacatagc 2280
307 caaaatgtga gtggttgaat atgattaaaa atatcaaatt aattgtgtga acttgggaagc 2340
309 acaccaatct tactttgtaa attctgattt cttttcacca ttcgtacata atactgaacc 2400
311 acttgtagat ttgatttttt ttttaattct ctgcatttag ggagtattct aataagctag 2460
313 ttgaataact gaaccataaa atgtccagta agatcactgt ttagatttgc catagagtac 2520
315 actgcctgcc ttaagtgagg aaatcaaagt gctattacga agttcaagat caaaaaggct 2580
317 tataaaacag agtaatcttg ttggttcacc attgagaccg tgaagatact ttgtattgtc 2640
319 ctattagtgt tatatgaaca tacaaatgca tctttgatgt gttgttcttg gcaataaatt 2700
321 ttgaaaagta atatttatta a 2721
324 <210> SEQ ID NO: 4
325 <211> LENGTH: 18
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Antisense Oligonucleotide
332 <400> SEQUENCE: 4
333 tggggaacgc atcgctgc 18
336 <210> SEQ ID NO: 5
337 <211> LENGTH: 18
338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial Sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Antisense Control Oligonucleotide
344 <400> SEQUENCE: 5
345 tggggaccgc atcgctgc 18

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/579,168

DATE: 01/11/2007

TIME: 10:29:55

Input Set : A:\SEQLISTING.txt

Output Set: N:\CRF4\01112007\J579168.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number
.L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date